

Staff Report
Cache Creek 23 June 2005 Hearing Panel Summary

**Amendments to the Basin Plan for the Control of Mercury in
Cache Creek, Bear Creek, Sulphur Creek, and Harley Gulch**

Staff presented proposed Basin Plan amendments for the control of mercury in the Cache Creek watershed to a hearing panel on 23 June 2005 in Sacramento. The hearing panel consisted of Regional Water Board members Robert Schneider (Chair), Karl Longley (Vice Chair), Alson Bizzard, and Lucille Palmer-Byrd. Patrick Morris and Janis Cooke gave the staff presentation. Eleven interested persons provided testimony including representatives from Yolo County agencies, the Yolo County Flood Control and Water Conservation District, UC Davis, US Fish and Wildlife Service, US Environmental Protection Agency, Sacramento Regional County Sanitation District, one owner of inactive mines, Delta Keeper, and stakeholders.

BACKGROUND

Regional Board staff has developed a total maximum daily load (TMDL) report for mercury in Cache Creek, Bear Creek, Sulphur Creek, and Harley Gulch. The report discussed mercury sources including inactive mercury mines, contaminated streambed sediments, and watersheds with naturally occurring mercury in undisturbed soils. The TMDL report also described beneficial uses, numeric targets, and mercury and methylmercury load reductions required to protect those uses. Staff is proposing amendments to the Basin Plan to implement the TMDL for Cache Creek and its tributaries. The Basin Plan staff report developed for the amendment provides background information and evaluates several alternatives to reduce mercury and methylmercury loading in the watershed.

The proposed Basin Plan amendment contains methylmercury fish tissue objectives that will protect humans and wildlife that consume fish from the Cache Creek watershed. The proposed amendment also describes an implementation plan to reduce levels of mercury and methylmercury. This plan includes requiring mine owners to reduce the loads of total mercury entering the creeks by controlling erosion and discharge from inactive mercury mines, requiring land managers and owners to reduce erosion of soils with elevated mercury concentrations, and reducing sources of methylmercury in the upper and lower watersheds.

SUMMARY

The public notice stated that the 23 June Regional Water Board meeting would be a hearing. Due to no quorum and staff's request for additional time to respond to written comments previously received and revise the staff report, the Chair stated that no formal action would be taken at the meeting. The hearing would be continued at a future Regional Water Board meeting.

The transcript from the hearing panel and the staff's presentation are part of the administrative record.

The staff presentation focused on major elements of the proposed amendment, comments received from the public prior to the hearing panel, and responses to the comments. Staff

emphasized that the proposed control program was consistent with existing Basin Plan and permit requirements. Erosion control measures need to be followed for mine sites, road construction and maintenance, and projects conducted in-channel downstream of the mined areas. New sources of methylmercury need to be controlled.

In summary, mine and hot spot remediation in the upper watershed will improve conditions in upstream water bodies like Harley Gulch and Sulphur Creek. Since actions in the upper watershed will result in minor improvements throughout the watershed, additional controls in the lower watershed are needed so as not to undo the remediations that occur upstream. Overall, the mercury loads from Cache Creek are a major source of mercury to Yolo Bypass and the Delta.

The major concerns stated by interested persons in the lower watershed were that the proposed fish tissue objectives are too restrictive, proposed plans to control erosion in the lower watershed would be expensive, and the proposals could negatively affect Cache Creek habitat restoration projects.

The Yolo County representatives indicated that the proposed implementation plan burdened Yolo County and that remediation efforts should focus on the upper watershed. They stated that plan would hinder future lower watershed environmental projects and not provide additional benefits. There was uncertainty about monitoring requirements and the economic analysis of the implementation plan did not account for all impacts. The County did not agree with assumptions for the water quality objectives. The County's expert testified that wildlife fish consumption rates differ from those reported by the experts at the US Fish and Wildlife Service. The Yolo County representatives indicated that not all sources have been identified and the watershed was very erosive.

Stakeholders from Yolo County indicated that the implementation plan is vague and questioned the fiscal impacts of the proposal. They had concerns that the CEQA discussion had not described all of the impacts to planned restoration areas in the lower watershed and habitat restoration projects for threatened and endangered species may be impacted. They questioned the benefits to the Delta of reducing erosion from lower Cache Creek watershed projects.

A UC Davis research ecologist provided testimony on wildlife fish consumption habits and suggested that a higher fish tissue objective could protect wildlife and human consumers of fish. He suggested that Staff incorporate his observations of Cache Creek bald eagles eating just fish into the fish tissue objective calculations. If Cache Creek bald eagles are assumed to not eat piscivorous birds, the safe level of methylmercury in fish can be higher. The US Fish and Wildlife service stated that the staff's proposed objectives are necessary to protect threatened and endangered species and are based on detailed studies of bald eagle prey at multiple Northern California nests. The US Fish and Wildlife Service supports the proposed objectives.

The US Environmental Protection Agency indicated that the TMDL elements met the federal requirements for a TMDL and they were supportive of the proposed fish tissue objectives and implementation plan.

Delta Keeper indicated that the USEPA's human health criterion is not really protective of human health, because it only allows for a few meals of fish per month. Also, the Board cannot put requirements on upstream entities while allowing downstream entities to undo those efforts. The mercury issue should not be characterized as pitting Cache Creek restoration against water quality.

The Sacramento Regional County Sanitation District had concerns about the relative cost of the implementation plan versus the expected benefits. The District recommended that implementation focus on total mercury rather than methylmercury.

The owner of the Wilbur Hot Springs resort and several mines did not believe that the discharges from the mercury mines were responsible for mercury problems downstream of the mines and that other sources of mercury should be considered such as roadbeds that have tailings. The owner was concerned that decisions had already been made by staff to work on cleanup orders for the mines when he believed that revegetation efforts would be more cost effective than mine cleanup.

Staff recommended that the Board allow additional time for revisions to the staff report and the release of a revised report in July. The public would have another opportunity to review and comment on the revised report. Staff recommended that the hearing be continued in October. Staff agreed to further discussions with Yolo County and the US Fish and Wildlife Service regarding the fish tissue objectives and suggested meeting with Yolo County to discuss issues related to the implementation plan (erosion control and new methylmercury sources) in the lower watershed.

RECOMMENDATIONS BY THE HEARING PANEL

The Chair recommended that a fourth implementation alternative be proposed that focused on efforts in the upper watershed and that would have less impacts on creek restoration efforts in the lower watershed. He indicated that lower watershed efforts could focus on broad-based monitoring to check watershed trends, rather than monitoring and other requirements for many small projects that have little impact on mercury. Methylmercury inputs to lower Cache Creek are still a concern, but staff should be clear about the meaning and impacts of "no net increase". He requested that Staff review the safe levels of methylmercury in bald eagle diet. The Chair also requested assurance from Counsel that the revised report will contain sufficient economic evaluation.

Staff agreed with the recommendations and will propose a plan that considers creek restoration efforts while controlling new methylmercury sources. Staff will meet Yolo County representatives prior to the release of a revised report.